

Questions and Answers About Wisconsin's Statewide Habitat Conservation Plan for the Karner Blue Butterfly



1. What is the Karner blue butterfly?

The Karner blue butterfly (*Lycaeides melissa samuelis*) is an endangered species. It was placed on the federal list of Threatened and Endangered Species in 1992. It is a small butterfly with a wingspan of about one inch, and as its name implies, is mostly blue in color. It completes two generations per year, and overwinters in the egg stage. It is not a strong flyer and does not move far from its home lupine patch.

2. What is its current status?

Historically, the Karner blue butterfly occurred in a narrow geographic area that extended from eastern Minnesota, across the Great Lakes states east to Maine. Currently, Wisconsin has the largest number of butterfly occurrences in the U.S. followed by Michigan. Other states where the butterfly is found are Minnesota, Indiana, New York, and New Hampshire, although they are found at fewer sites and in lesser numbers in these states. The Karner blue butterfly was reintroduced to Ohio in 1998. The butterflies are completely gone from their former range in Iowa, Illinois, Pennsylvania, Massachusetts, Maine, and the province of Ontario.

3. What kind of habitat does the butterfly require?

The Karner blue butterfly is restricted to habitats that support wild lupine plants. In Wisconsin, this habitat is typically dry, sandy openings, including openings in oak savannas, jack pine stands, and dune or sandplain communities. The larva or caterpillar is solely dependent on the wild lupine (*Lupinus perennis*) plant as its food source. The adult butterflies depend upon a number of flowering plants (e.g. butterfly weed, New Jersey tea, leadplant, and flowering spurge).

4. What are threats to this species?

Like most rare species, the Karner blue butterfly is threatened with loss or degradation of habitat due to development, land management activities, and the lack of natural disturbance such as wildfire and grazing by large mammals. Such disturbance helps maintain the butterfly's habitat by setting back encroaching forests, and encouraging lupine and flowering plant growth.

5. Is a recovery plan being prepared for the Karner blue butterfly?

Yes, the U.S. Fish and Wildlife Service (Service) appointed a Karner Blue Butterfly Recovery Team and that team has drafted a recovery plan. The Technical/Agency Draft Recovery Plan should be available for public review this year.

6. Where does the butterfly occur in Wisconsin?

The Karner blue butterfly has been *documented* from part, or all, of the following 21 central and northwest sandy counties of Wisconsin:

Adams	Green Lake	Outagamie
Barron	Jackson	Polk
Burnett	Juneau	Portage
Chippewa	Marquette	Shawano
Clark	Menominee	Waupaca
Dunn	Monroe	Waushara
Eau Claire	Oconto	Wood

In addition, *potential* habitat occurs in parts or all of the following eight counties:

Buffalo	Pierce	Trempealeau
La Crosse	Rusk	Washburn
Pepin	St. Croix	

Areas supporting the butterfly in Wisconsin include utility, or roadway rights-of-way, abandoned agricultural fields, managed forest lands, military training areas and bombing ranges, and managed and unmanaged barrens, savannas, and prairie areas that support wild lupine plants.

7. What are Incidental Take Permits and Habitat Conservation Plans (HCPs)?

In 1982 Congress amended the Endangered Species Act to allow the U.S. Fish and Wildlife Service to issue Incidental Take Permits to private parties undertaking otherwise lawful projects that might result in the “take” of an endangered or threatened species. Before issuing an Incidental Take Permit, an HCP must be prepared. The HCP outlines a conservation program that will avoid, minimize, mitigate, and monitor the “take” of the species, and provide the necessary resources to conduct the conservation program.

8. What is “take?”

“Take” is defined in the Endangered Species Act as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a threatened or endangered species. Harm includes significant habitat modification or degradation that results in the killing or injury of wildlife by significantly impairing essential behavioral patterns such as breeding, feeding, or sheltering. An incidental take permit allows “take” at levels that do not threaten the species’ long-term survival and recovery.

9. What are the required elements of a HCP?

An HCP must contain the following information:

- A review of the impacts likely to result from the activity,
- the applicant's measures to mitigate, minimize and monitor impacts,
- funding made available to implement the HCP,
- procedures to deal with unforeseen circumstances,
- a discussion of the alternatives to the proposed taking and why they were not selected, and
- additional measures (as required), to be agreed-upon between the Service and the applicant.

10. What are the components of the Wisconsin DNR’s Incidental Take Permit application?

The Incidental Take Permit application contains the following documents:

- HCP and partner Species and Habitat Conservation Agreements
- Implementation Agreement between the Wisconsin DNR and the Service,
- combined Wisconsin, and National Environmental Policy Act (WEPA/NEPA) document, and
- standard application form (\$25.00 fee waived for governmental entities.)

11. **What conditions must be met for the U.S. Fish and Wildlife Service (Service) to issue an Incidental Take Permit for the HCP?**
The following conditions must be met prior to issuance of an Incidental Take Permit:
- the taking will be incidental to an otherwise lawful activity;
 - the impacts will be minimized and mitigated to the maximum extent practicable;
 - adequate funding will be provided to ensure that the HCP will succeed;
 - the taking will not appreciably reduce the likelihood of the survival and recovery of the species; and
 - any other measures the Service considers necessary for purposes of the plan.
12. **What is a Species and Habitat Conservation Agreement?**
Each of the partners to the HCP has developed a Species and Habitat Conservation Agreement. These Agreements contain the conservation commitments of the partners. Some partners have outlined specific conservation measures in their conservation agreements. Other partners have agreed to follow the guidelines in the HCP; and the remaining will do a mix of what is in the HCP and their own approach. These agreements have been entered into, by, and between each partner and the Wisconsin DNR. The Species and Habitat Conservation Agreements form the basis of Wisconsin DNR's Incidental Take Permit application.
13. **What is the process to obtain an Incidental Take Permit?**
The process for obtaining the Incidental Take Permit started with the Wisconsin DNR submitting a complete application to the Service (refer to Question No. 10). After receiving the application, the Service published a Federal Register notice announcing the availability of the Incidental Take Permit application and associated WEPA/NEPA document for public review. To solicit further public input on the application, the Service and the Wisconsin DNR held three public meetings during May 11-13, 1999. Upon close of a 60 day comment period, the Service reviewed all the comments and, if necessary, the HCP and/or EIS were modified as appropriate and a permit decision was made. The final EIS is now available to the public. Based on the information in the application, EIS, and public comments the Service has made a decision to issue the Incidental Take Permit. The record of decision will be published in the Federal Register.
14. **What is the geographic scope of the HCP?**
The geographic scope of the HCP is the state of Wisconsin. The HCP sets up a program to cover "take" of the Karner blue across the state. However, "take" of the Karner blue is not anticipated outside the high potential range of the butterfly which includes parts, or all, of the counties noted in Question No. 6 (above) as no Karner blues have been documented outside of this area.
15. **Why is a *statewide* HCP being done in Wisconsin?**
Because of the broad distribution of Karner blue butterflies across the State of Wisconsin, the Service, various landowners in the state, and the Wisconsin DNR recognized the need to work with public and private landowners to achieve a maximum level of conservation for this species. The HCP proposes a statewide conservation effort that gains and incorporates the support of landowners and land users throughout the state. Doing one statewide HCP also streamlines the permit process providing for the development and processing of one Incidental Take Permit application (in lieu of 26 separate Incidental Take Permit applications), provides for a landscape scale approach to conservation, and provides the land base for support of the voluntary conservation group identified in the HCP's Participation Plan (refer to Question No. 18).

16. Who are the partners to the HCP?

Wisconsin Department of Natural Resources (DNR) is the applicant for the permit. There are 26 partners party to the permit (including the DNR). The 26 partners can be divided into the following five partner groups:

Industrial Forest Companies	Wisconsin State Agencies	County Forests	Utilities	Non-Profit Conservation Organization
Consolidated Papers, Inc.	Department of Natural Resources	Burnett County	ANR Pipeline Co.	The Nature Conservancy
Nekoosa Papers Inc. (Georgia-Pacific Corp.)	Department of Agricultural, Trade, and Consumer Protection	Clark County	Lakehead Pipeline Co.	
Johnson Timber Company	Department of Transportation	Eau Claire County	Northern States Power Co.	
Wausau-Mosinee Paper Corporation		Jackson County	NW Wisconsin Electric Co.	
Thilmany Division- International Paper		Juneau County	Polk-Burnett Electric Co-op.	
		Monroe County	Wisconsin Gas Co.	
		Washburn County	Alliant Energy - WI Power and Light	
		Wood County	Wisconsin Public Service	
			Wisconsin River Power Co.	

17. Can other landowners and land users become parties to the Incidental Take Permit?

Yes, the HCP includes a Participation Plan that describes an application process that other landowners and land users can use to become party to the Permit. Landowners or users that have land in the high potential area for the Karner blue butterfly and that are involved in activities resulting in: 1) permanent take, 2) right-of-way management, and/or 3) commercial forestry (own greater than 1,000 acres of forest land in Wisconsin) will need permit coverage for incidental take of the butterfly and can apply to the Wisconsin DNR to become party to the Incidental Take Permit. The application process includes developing a Species and Habitat Conservation Agreement consistent with the HCP and receiving a Certificate of Inclusion from the Service.

18. Are some landowners and land users exempt from needing Incidental Take Permit coverage, like small private landowners?

Yes, the Participation Plan discussed in Question No. 17 above proposes that small private landowners, and forestry landowners with less than 1000 acres of land be placed in a voluntary category relative to conservation of the butterfly and that these landowners be allowed to incidentally “take” Karner blues without the need for any additional permit coverage. The “take” of Karner blues would be covered by the Incidental Take Permit issued to the Wisconsin DNR. However, this strategy is based on a geographically focused education and outreach program implemented by the partners and participants to the HCP, that encourages conservation of the butterfly. If the outreach program is not effective in helping to conserve the butterfly, this part of the Participation Plan may be modified or deleted from Incidental Take Permit coverage. The primary reason for the small landowner exemption is to encourage private landowners to undertake activities that will conserve the species (e.g. habitat management to maintain the early

successional habitat needed by the butterfly). The Wisconsin DNR's risk assessment associated with this strategy indicates adverse impacts to the Karner blue should be minimal.

Note: The intentional "take" (e.g. the intentional collection, harming, killing, etc.) of the Karner blue butterfly by private landowners or any other party would NOT be covered by the Incidental Take Permit.

19. How do I know if I've got Karner blue butterflies on my property?

For the butterfly to be present, wild lupine must occur on or near your property. Wild lupine is the sole food plant of the butterfly larvae or caterpillar. The butterfly is small, with about a one inch wingspan. The upper side of the male wing is a bright blue with a black margin and white fringed edge. The upper side of the female is similar, but the color is a duller blue mixed with gray-brown. The underside of both sexes of the butterfly's wings are grayish fawn in color. There are orange crescents and metallic spots along the outer edge of the underside of both hind wings. If you have lupine on or near your property and you see a butterfly matching this description, you can call Mr. Dave Lentz, DNR's HCP Coordinator at 608-261-6451 or Ms. Catherine Carnes of the Service at 920-465-7415 for further assistance in determining whether you have the Karner blue butterfly. There are several "blue" butterflies, and to accurately identify the Karner blue requires the assistance of a trained biologist.

20. How can I help or contribute to this Karner blue butterfly conservation effort?

You can help by learning about the Karner blue and its habitat requirements and by spreading the word to public and private parties as well as educators about this initiative. If you have Karner blue butterflies on or near your property, you can help by implementing management measures to maintain butterfly habitat (e.g. removing brushy growth, planting lupine and nectar plants, etc.). The Service has a program that provides technical and monetary assistance to private landowners who would like to help conserve the butterfly on their property. For more information on the Service's land owner assistance program you can contact Ms. Catherine Carnes at 920-465-7415.

21. If I have Karner blue butterflies on my property and am restricted in my use of the property, isn't this a taking of my private property rights?

No. First, if the Karner blue is present on your property, some activities can be done that will not result in "take" e.g. hand cutting of trees and brush in winter under frozen ground conditions. This type of low intensity activity can still proceed. If Karner blues are present, and you are a landowner that falls into the voluntary category of the HCP's Participation Plan your incidental take activities will be covered by the Incidental Take Permit (refer to Question No.18). Landowners who do not fall into the voluntary category, and wish to incidentally "take" Karner blues can become party to the Incidental Take Permit through an application process which entails developing a Species and Habitat Conservation Agreement and being issued a Certificate of Inclusion by the Service (refer to Question No. 17). In summary, the Endangered Species Act and this HCP and Incidental Take Permit specifically provide avenues to permit the incidental "take" of the Karner blue butterfly on private lands.

22. How will the agricultural community be affected by this HCP?

The agriculture community falls into the voluntary conservation group as discussed in the HCP's Participation Plan (refer to Questions No.18). As such they will be exempt from the need for further permit coverage for activities that may incidentally "take" the butterfly. However, this strategy is based on a geographically focused education and outreach program implemented by the Wisconsin Department of Agricultural, Trade, and Consumer Protection (DATCP), that encourages conservation of the butterfly on agricultural lands. If proven ineffective in conserving the butterfly, this part of the Participation Plan may be modified or deleted from Incidental Take Permit coverage.

23. What effect will the HCP have on existing land management practices on partner lands?

The HCP will allow existing partner land management activities which include savanna and barrens management; state highway and utility line corridor construction and maintenance activities; and forestry

activities to proceed. However, measures will be incorporated into these activities to avoid, minimize, and mitigate harm to the Karner blue butterfly to insure its long-term persistence in Wisconsin. Examples of conservation measures included in the HCP are fall mowing and herbicide applications to protect lupine and nectar plants, the creation of dispersal corridors between Karner blue butterfly sites, and the maintenance of a shifting mosaic of forestry habitat to maintain suitable habitat for the butterfly on a landscape scale basis. Any permanent take of habitat will require the development of a mitigation plan.

24. What effect will the HCP have on the Karner blue butterfly?

It is anticipated that the implementation of the HCP will have a positive effect on the conservation of the Karner blue butterfly in Wisconsin. Disturbance of habitat areas through maintenance activities (e.g. mowing, burning, fall herbicide application, forestry clearcuts) is integral to maintaining the early successional habitat on which the Karner blue butterfly depends. The majority of “take” of the butterfly is anticipated to be short term “take” consistent with the HCP, and associated with habitat management activities; such activities will benefit the butterfly in the long-term through habitat maintenance. Any permanent take of habitat will require the development of a mitigation plan to offset the “take.” In addition, the Wisconsin DNR and The Nature Conservancy are committing to go beyond conservation to working on recovery of the Karner blue on 11 key properties in Wisconsin.

25. How will the HCP affect other rare species in Wisconsin?

There are several rare species that are either state- or federally-listed, or state or federal species of concern in Wisconsin that are anticipated to benefit from implementation of the HCP. These are species that, like the Karner blue, require early successional habitat and include the Kirtland’s warbler, slender glass lizard, eastern massasauga rattlesnake, wood turtle, powesheik skipper, regal fritillary, yellow gentian, and Hill’s thistle. Nine state listed species and three federally-listed species have been identified that could be adversely affected by management activities covered in the HCP. For this group of the species, individual partners would be required to consult with either the Wisconsin DNR or the Service (as appropriate) and obtain all necessary state or federal permits prior to proceeding with an activity that may affect the species. *Take of the federally- listed species other than the Karner blue would NOT be authorized by the Incidental Take Permit.*

26. Who monitors HCP compliance, and what happens if someone fails to comply?

The Wisconsin DNR and the Service will monitor the project for compliance with the terms and conditions of the Incidental Take Permit. The HCP identifies an auditing program to be implemented by the Wisconsin DNR that involves annual audits of each partner for compliance with the HCP and Incidental Take Permit. Violation of the terms of an Incidental Take Permit are a violation of the ESA. The penalties are prescribed by law.

27. How long will the Incidental Take Permit be in affect?

The Incidental Take Permit would be issued for 10 years and may be extended beyond that period.

